

U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 5,800,673 to Okuda et al. (“Okuda”). Moreover, claims 5-12 stand rejected under 35 U.S.C. § 103(a), as allegedly rendered obvious by Okuda in view of U.S. Patent No. 5,478,872 to Yamasoe.

2. Objections to the Drawings

The drawings stand objected as allegedly failing to depict the claimed elements of the heat exchanger. Applicants have added a new **Fig. 2** depicting the claimed elements of the heat exchanger. Therefore, Applicants respectfully request that the Examiner withdraw the objections to the drawings.

3. 35 U.S.C. § 102(b)

Claims 1-4 and 12 stand rejected as allegedly anticipated by Okuda. “A claim is anticipated if and only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP 2131. The Office Action alleges that Okuda describes each and every element as set forth in claims 1-4 and 12. Applicants respectfully traverse.

Applicants have canceled original claim 12, without prejudice. Therefore, the anticipation rejection of claim 12 now is moot. Applicants also have amended original claim 1 to describe a heat exchanger comprising “a first aluminum member coated with a first portion of a resin, and a second aluminum member coated with a second portion of said resin, wherein said first aluminum member is fixed to said second aluminum member via said first portion of said resin and said second portion of said resin.” (Emphasis added.) As such, the resin fixes the aluminum members to each other.

In contrast, Okuda describes a heat exchanger including a plurality of tubular elements 1. Tubular elements 1 are fixed to each other by “arranging two dish-like core plates 6 into an inside-to-inside relation and subsequently brazing them at their peripheries 6a to be integral with each other.” Okuda, Column 8, Lines 53-56. Specifically, a “brazing agent layer is applied by a cladding technique so that the core plates 6 are easily brazed together.” Id. at Column 8, Lines 59-61. Each core plates 6 includes a rib 7, and “a plurality of straight drainage canals 7a are defined by the inwardly protruding recessed ribs 7.” Id. at Column 10, Lines 20-21. Moreover, “in order to improve the drainage of condensed water, it is desirable and effective that the straight canals 7a are covered with a resin coating which is of moderate hydrophilic property.” Id. at Column 10, Lines 21-24 (emphasis added.) As such, the resin coating described in Okuda increases drainage.

Nevertheless, because core plates 6 are fixed to each other via the brazing agent layer, and the resin coating applied to straight canals 7a merely increases drainage, core plates 6 are not fixed to each other via the resin coating. Thus, Okuda fails at least to describe a heat exchanger comprising “a first aluminum member coated with a first portion of a resin, and a second aluminum member coated with a second portion of said resin, wherein said first aluminum member is fixed to said second aluminum member via said first portion of said resin and said second portion of said resin,” as set forth in amended claim 1. Therefore, Applicants respectfully request that the Examiner withdraw the anticipation rejection of claim 1. Claims 2-4 depend from amended claim 1. Therefore, Applicants respectfully request that the Examiner also withdraw the anticipation rejection of claims 2-4.

4. 35 U.S.C. § 103(a)

Claims 5-12 stand rejected as allegedly rendered obvious by Okuda in view of Yamasoe. Applicants respectfully traverse. Specifically, Applicants have canceled original claims 11 and 12, without prejudice. Therefore, the obviousness rejection of claims 11 and 12 now is moot. Moreover, as noted above, Applicants have amended original claim 1 to describe a heat exchanger comprising “a first aluminum member coated with a first portion of a resin, and a second aluminum member coated with a second portion of said resin, wherein said first aluminum member is fixed to said second aluminum member via said first portion of said resin and said second portion of said resin.” As such, the resin fixes the aluminum members to each other. As set forth above with respect to the anticipation rejection of claim 1, Okuda fails to disclose or suggest that the first aluminum member is fixed to the second aluminum member via the resin. Moreover, the Office Action does not allege that Yamasoe or any other reference discloses or suggests these missing elements. Claims 5-10 depend from amended claim 1. “If an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” MPEP 2143.03 (citations omitted). Therefore, Applicants respectfully request that the Examiner withdraw the obviousness rejection of claims 5-10.

CONCLUSION

Applicants respectfully submit that this application is in condition for allowance, and such disposition is earnestly solicited. If the Examiner believes that an interview with Applicants’ representatives, either in person or by telephone, would expedite prosecution of this application, we would welcome such an opportunity. Applicants believe that no fees are due as a result of this responsive amendment. Nevertheless, in the event of any variance between the fees

determined by Applicants and those determined by the U.S. Patent and Trademark Office, please charge any such variance to the undersigned's Deposit Account No. 02-0375.

Respectfully submitted,

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By:

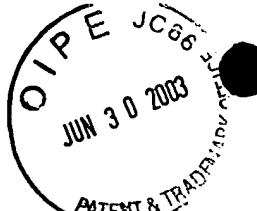
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Enclosure



PATENT
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MARKED-UP COPY OF AMENDMENTS TO THE CLAIMS, SPECIFICATION, AND

DRAWINGS

RECEIVE

IN THE DRAWINGS:

Please add new **Fig. 2**.

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IN THE SPECIFICATION:

Please new paragraphs [0012.1] and [0013.1], as follows

[0012.1] **Fig. 2** is a heat exchanger according to an embodiment of the present invention.

[0013.1] Referring to **Fig. 1**, a heat exchanger 1 may comprise a plurality of heat transfer tubes 2 and a plurality of outer fins 3, such that heat transfer tubes 2 and outer fins 3 are alternately stacked. Each heat transfer tube 2 and the corresponding outer fin 3 form a heat exchanger core 1a.

IN THE CLAIMS:

Please cancel original claims 11 and 12, without prejudice.

Please amend original claims 1, 2, and 5-10, as follows:

1. (amended) A heat exchanger comprising:

[an] a first aluminum member coated with a first portion of a resin; and
a second aluminum member coated with a second portion of said resin, wherein
said first aluminum member is fixed to said second aluminum member via said first portion of
said resin and said second portion of said resin.

2. (amended) The heat exchanger of claim 1, wherein at least one constituent part of said heat exchanger comprises [one of] said first aluminum member and said second aluminum member.

5. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin is a thermoplastic resin.

6. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin is a thermosetting resin.

7. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin provides lubricity.

8. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin is a polyester resin.

9. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin is a nylon resin.

10. (amended) The heat exchanger of claim 1, wherein each of said first and second portions of said resin is a vinylidene fluoride resin.